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REMARKS

In response to the Examiner's Office Action, applicant has amended the three independent claims in the application to clearly claim that applicant's device, method and system operate without receiving any incoming data or signals sent to the device to elicit a response by the user.

The specification supports the amendments. On page 1, in the background of the invention, applicant describes current response systems, some centered around computer systems which send data over the world wide web, and some operating "using wireless and/or wired technology that sends signals to a receiver within the room [where an audience is sitting]...." In both types of systems, data is sent to an audience member, and the audience member responds to that data. (Ferris' remote control receives PAD data which is displayed on the device and to which a user responds.) Applicant describes the existing technology as having drawbacks, which he specifies that his invention overcomes. In the Detailed Description of the Invention, page 4, lines 4-5, the applicant states: "there is no need to construct facilities and provide computer equipment in order for audience members to receive the programming and to respond to the programming" (the programming to which the user responds is, of course, broadcast over conventional communications mediums (p. 3, ll. 11-26), not programming received by the response device. Nowhere in the specification does applicant describe having the response device receive data or signals to which the user enters a response. The Abstract specifically describes a response device that receives user input (not incoming signals) and transmits that input over existing communication systems.

Applicant would point out that the specification does not describe using a display on the response device. In fact, the response device is operational without a display of any kind. For example, the limited key pad 205 may have a true key, a false key, and keys to answer multiple-choice questions. Without receiving any incoming signal or viewing any data on a display, the user can input data into the response device by selecting one of the keys in response to a presenter's question arising in programming received apart from the device. Fig. 2 shows a calculator-like display, which can show the data the user is inputting; however, the application does not describe using a display to view incoming data because the response device does not receive display data which the user will view and respond to.

In any event, the amendments should place all the claims in condition for allowance.

Applicant has reviewed the office action and recognizes that the Examiner's grounds for rejection are similar to those in his Office Action of February 8, 2006. Applicant addressed these rejections in his Appeal Brief filed on April 27, 2006. Nonetheless, in compliance with 37 C.F.R. §1.111, applicant herewith restates many of his previous arguments in response to the present office action.

On page 9 of the Office action, the Examiner rejected claims 1 through 2, 13 through 15, 17, 20 through 21, and 27 under 35 USC §102(b) as being anticipated by Ferris *et al.* (WO 99/04,568).

The Ferris reference describes a remote control device for consumer broadcast receivers (see Abstract). It differs from a normal remote control by including a display. The reference specifies that "there is a need to have an outbound channel, holding the programme-associated data [PAD], which is broadcast to the user in parallel with the

programme channel" (p. 3, ll. 26-27 – p. 4, l.1) The device receives PAD via a radio link, displays it to the user, and sends interaction data back to a central processing station.

As summarized by Ferris, the

"invention provides apparatus and method for providing simple, efficient and economic display of advertisements, product and service offers, and other information (collectively, 'display data') to the users of broadcast receivers, and is intended to have particular application where said display data is related to the programmes picked up by such receivers. The invention also provides apparatus and method for users, where applicable, to interact with said display data (for example, to order an offered product, or to request more information about an advertised good or service), and for the details of such interaction (collectively, 'interaction data') to be sent back to the sponsoring party for processing." (Ferris, p. 6, ll. 14-22)

To operate, the Ferris device clearly requires the use of transmitted display data.

"Incoming display data is stored in memory within the said device until it becomes eligible for display. Generally, such data will be timed to become eligible for display at a point where the programme on the associated channel contains relevant content, (thereby satisfying condition 1) mentioned in the background section); in such a circumstance the display data may be termed programme associated data, or PAD, and the point in time of activation is known as the cue point. The list of PAD items and associated cue points, for each programme broadcast on a given channel (which can include infomercials and commercials, for our purposes) must be provided to a central PAD scheduler, either ahead of time, just in time, or some combination of both. The scheduler co-operates with a database system to hold this list, and, at the appropriate point (either ahead of or at the cue point), passes the next due PAD item, including its cueing information, through to a radio transmission system, which it then sends it to users' handsets, as rehearsed above." (Ferris, p. 7, ll. 5-17)

Further, Ferris requires the feed of data to be ongoing.

"Notice that such a device, if it is to be generally useful, must be able to receive PAD items in an ongoing feed. There are two main reasons for this. First of all, the fact that any reasonably-priced embodiment of such a device can have only a modest amount of onboard memory, places a limit on the number of PAD items that can be downloaded to it in any given batch mode transfer. Second, for certain events, such as televised live horse races, the outcome is not known in advance, and so neither, a fortiori, is the content of any event-related PAD. Such PAD cannot, therefore, be downloaded in advance of the event using a batch mode transfer.

These two factors, namely limited buffer memory in the device, and the dependence of certain PAD items on live events, means that the ongoing feed of PAD to the device must take place in 'real time' or close to 'real time'. 'Reel [sic] time' feed is required in the second scenario mentioned, where PAD content is contingent upon an event, the outcome of which is unknown until the time of broadcast. Once the event in question is determined (for example, a particular horse wins the race), the relevant PAD may be constructed and is then immediately due for presentation to interested users. Ideally, as little additional delay as possible is incurred from this point on; hence the term 'real-time'. Near 'real-time' feed is required in the first scenario, where PAD items transmitted to the user device must be relevant to a primary broadcast within the near future, if buffer overflow in the device is to be avoided." (Ferris, p. 4, ll. 27-28 – p. 5, ll. 1-19)

In all cases, the Ferris device must receive display data before a user may enter a selection related to the data displayed, and the display data the user views (an ad, a product offer, etc.) has been preselected and constructed by the broadcaster or "host." In all cases, the user is limited to "responding" to the data on the display; he cannot enter data he has constructed independently of the device.

The present invention, on the other hand, provides a device, method, and/or system which allows a user to provide responses to any type of programming, whether live or recorded, by using the device with a key pad to input his own data and then transmit the data over a standard communication system, such as a two-way paging system to a central processing unit. The response system is not tied to any one type of programming over a particular medium. Obvious uses include responding to programs broadcast over television, radio, or streaming internet, but the invention can also be used with prerecorded media, such as audio tapes or video tapes, or even live events. The response system does not download data to which a user responds. Instead, the user of the system himself initiates the inputting of a program code (and possibly, the user code), and then enters his response to the program he has received apart from the device.

The present invention solves several problems disclosed in the Ferris reference. Unlike the Ferris device, the present invention is not required to have "on board" memory to hold the downloaded PAD data, nor does it have the associated problem of which pieces of PAD data to discard when new messages come in (Ferris, p. 18, ll. 15-25). Further, the present invention can be effectively used with a low-cost paging network; it does not seem to be feasible to use the Ferris device with a paging network because paging networks are very low speed data networks which would have a difficult time transmitting all the PAD data required by the Ferris device. Finally, the present invention does not ever require the sophisticated means for synchronizing the transmission of PAD data to the transmission from a primary broadcaster, such as Ferris describes in his alternate embodiment. Clearly, the present invention differs greatly from the Ferris device, and is not anticipated thereby.

The Examiner claimed to find the "means for requiring the user's input of a program identifier code for the program received apart from the response device" in Ferris' input controller 611, and again cited the examples shown in Fig. 2A and 2L (purchasing a tool or other product). However, unlike the present invention, neither of these examples describes requiring use of a program identifier code, which allows for proper processing and correlation of the data a user inputs. Instead, Ferris' user is simply entering information to purchase products offered on the PAD display.

The Examiner then found that the central processing unit of the present invention reads on Ferris's microprocessor 607. However, the Examiner's discussion displays the fallacy of his argument: he states that:

"by responding to the 'product/vendor code' input through the handheld device on the basis of the information inputted by the user, the inputted 'product/vendor code' is

transmitted back to the central control station along with HUUID (page 13, 3rd paragraph). In doing so, the inputted 'product/vendor code' constitutes an input from the user of a program identifier code (PADUID) for the particular programming event (display PAD) in which the user is responding along with the user identifier code associated with the remote device (HUUID); see page 13, 3rd paragraph)"

He stated that the "product/vendor code" constitutes the input of a program identifier code, and the user identifier code is the HUUID. Nowhere did he find that Ferris' microprocessor can correlate responses the user has entered into the device to the program identifier code, or that responses are processed by the microprocessor. Perhaps that is because there are no such examples in Ferris.

In rejecting claim 1, the Examiner cited Fig. 4, page 23 of Ferris as disclosing the claim language "in response to a program received apart from the response device," stating that Ferris' "remote control device is used to respond to programming/television programming shows,' i.e. tool show with option to buy a product received apart from the response device" However, as previously argued, this example does not involve a user's response to the show itself. In Ferris, the program is "The Tool Show" – and as the presenter starts to demonstrate the use of good drilling technique 503, the handset 502 displays a programme-related offer 504 for the drill that the presenter is using. The PAD item corresponding to this offer will have been downloaded to the device from the relevant central processing station 420 (Figure 3) at some point previously, and cued up at the appropriate point for display" (Ferris, p. 23, ll. 5-10) Further, Ferris' "user input mechanism" is not used for entry of user-initiated responses. The example used by the Examiner (Fig. 2L, page 27, ll. 13-17) describes a device which "prompts" the user to enter a product/vendor identification code, which initiates a remote query to display product

information. This is not a response to a program received apart from the device; instead it is simply input related to the display on the device. Nothing in Ferris suggests that a user can use the device to respond to anything other than PAD data displayed on the screen of the device. In any event, the amended claim is not anticipated by Ferris because it claims a device which operates without receiving signals eliciting a response by the user. Claim 1 should be allowable over Ferris.

Claim 2, which is dependent upon claim 1, which should now be allowable, should be allowable as well.

The Examiner indicated that claim 13 was analyzed with respect to apparatus claim 1. Applicant's arguments related to claim 1, *supra*, are similarly relevant when reviewing claim 13. The Examiner ignored the fact that Ferris nowhere discloses having an audience member input the program identifier code. Further, the Examiner apparently lumps together "collecting the response data . . .," correlating the program identifier code to the responses, and processing the response data, referring generally to page 15, 1st paragraph; page 24, 1st through 3rd paragraphs. However, the material on page 15, 1st paragraph has no relevance at all to the rejection. Further, the latter reference to page 24 shows general uses of Ferris' device, but fails to disclose the step of correlating the program identifier code (entered by the audience member) to the audience member's responses. In the examples cited, Ferris discloses an audience member "responding" to the PAD data shown on his device. Because "responses" are always to PAD on the display, any response entered by an audience member which is not related to the PAD cannot be processed!

In any event, the amended claim 13 is not anticipated by Ferris because it claims a

device which operates without receiving signals eliciting a response by the user. Claim 13 should be allowable over Ferris.

Claims 14, 15 and 17 which are dependent upon claim 13, which should now be allowable, should be allowable as well.

In rejecting claim 20, the Examiner found the step of "providing a program identifier code for the program being presented" as being Ferris' PADUID of the initial display data. However, Ferris' PADUID is defined at page 7, 4th paragraph, as a "unique identifier" that is part of a "PAD software object" which is sent from the central broadcasting station to the device. As a result, Ferris clearly does not disclose the step of "[H]aving an audience member input the program identifier code into the user input device." The Examiner sets forth a tortured argument that, since the selected PAD is transmitted back to the central control station along with the PADUID, that somehow the process "constitutes an input from the user of the program identifier code (PADUID) for the particular programming event (displays PAD)" His argument is false; if anything, it shows that Ferris' PAD data is inextricably tied to its identifier (PADUID), and that Ferris provides no means by which a user can input a program identifier code for a program received apart from the device. Further, nothing in Ferris describes the step of correlating the program identifier and the responses.

In any event, the amended claim 20 is not anticipated by Ferris because it claims a device which operates without receiving signals eliciting a response by the user. Claim 20 should be allowable over Ferris.

Claims 21 and 23, which are dependent upon claim 20, which should now be

allowable, should be allowable as well.

On page 14 of the office action, the Examiner rejected claim 3 under 35 USC §103(a) as being unpatentable over Ferris *et al.* (WO 99/04568) in view of Dobson (U.S. 6,704,317). The Examiner noted that "Ferris does not clearly disclose the transmitter is configured to send data burst over standard telephone lines; and the communicating system comprises a plain old telephone system." He relied on Dobson (which describes a POTS modem transceiver) for the disclosure of such a transmitter, and stated that it would have been obvious to modify Ferris to have Ferris' transmitter configured to perform the above-referenced steps as taught by Dobson. However, Ferris teaches against such a modification. Ferris specifically stated that the PAD broadcast channel is "received by a device without the use of a . . . telephone modem" (p. 4, l. 11) and indicated that the device did not operate like existing systems that relied on inconvenient back-channel paths like telephone modems (p. 4, ll. 19-20). In any event, claim 3, which is dependent on claim 1, which should now be allowable, should be allowable as well.

On page 15 of the office action, the Examiner rejected claims 4, 5, 6, 18 and 24 as being obvious over Ferris *et al.* (WO 99/045,698).

In rejecting claim 4, the Examiner agreed that Ferris does not disclose the fact that the transmitter is configured to call telephone numbers of each of the telephone numbers having been associated with a particular response to the program; nor that the communication system is a plain old telephone system. However, he took Official Notice "that having a remote control with integrated modem with associated call number for communications purpose using a plain old telephone number is notoriously well known in

the art." However, the use of a modem with an associated call number has nothing to do with either the present invention or with Ferris. The modem the Examiner refers to does not call one of several telephone numbers, each having been associated with a particular response to the program, as described in the present invention. Further, Ferris does not contain any suggestion that it could be configured to have a modem call one of several telephone numbers. In the absence of such a suggestion, the proposed modification is not likely. Therefore, the Examiner's taking an Official Notice of the use of modems is not only irrelevant to the present invention, it is also not persuasive.

The same argument can be made for the Examiner's treatment of claim 5 and claim 6. Nothing in Ferris teaches or suggests use of its device with an internet protocol system, and, therefore, his rejection on the basis of Official Notice should be set aside. Further, claims 4 and 5, which are dependent on claim 1, which should now be allowable, and claim 6, which is dependent on claim 5, should all be allowable as depending from claim 1.

The Examiner analyzed claim 18 with respect to claim 4. Therefore the argument *supra* is equally applicable, and applicant will not repeat it here. Further, claim 18, which is dependent upon claim 13, which should now be allowable, should be allowable as depending from allowable claim 13.

The Examiner analyzed claim 24 with respect to claim 4. Therefore the argument *supra* is equally applicable, and applicant will not repeat it here. In any event, claim 24, which is dependent upon claim 20, which should now be allowable, should be allowable as depending from allowable claim 20.

On page 16 of the office action, the Examiner rejected claim 7 under 35 U.S.C.

§103(a) as being unpatentable over Ferris *et al* (WO 99/04568 in view of Yoshinoba *et al* (U.S. 5,721,584). Applicant has amended claim 1 to be allowable. Claim 7, which is dependent upon claim 1, should be allowable as depending from allowable claim 1.

On page 17 of the office action, the Examiner rejected claims 19 and 25 under 35 U.S.C. §103(a) as unpatentable over Ferris *et al* in view of Lewis *et al* (U.S. 5,303,042). The Examiner has argued that, while Ferris does not clearly describe having the audience member log into a remote computer system before inputting data into the device, Ferris does describe having users log on the keypad device (at page 25, 3rd and 4th paragraphs). Once again, applicant is at a loss to understand the analogy. The paragraphs he cites in Ferris merely describe how the user "unlocks" the device with a PIN, which can be preset for multiple users. This does not contain a suggestion that a user logs into a remote computer system before inputting responses. The Examiner's proposed modification of using Lewis "so that the remote computer able to track all viewer currently log on the system" would change the principle of operation of Ferris (Ferris is, after all, a remote control device). Claims 19 and 25, which depend upon claim 1, which has been amended to be allowable, should be allowable over the references cited.

Applicant's invention is highly novel, useful, and nonobvious. It provides a device and system that can be used anywhere to respond to any type of programming without the use of a computer or other expensive equipment, without the need for an internet connection, and without receiving signals eliciting responses. The user can input original thoughts, questions, and answers. After responses are received and processed, they can be sent to the presenter of the program, who can incorporate them into an ongoing presentation (such

as a lecturer teaching a lesson to students over closed-circuit television).

The Examiner's reliance on the Ferris reference is flawed. All the claim elements of the present invention are not found in Ferris, which discloses a device concerned only with having a user "respond" to PAD broadcast to a display on his remote control.

In light of the foregoing arguments, and upon entry of the amendments, allowance of claims 1 through 7 and 13 through 15, 17 through 21, and 23 through 25 should be in order and is respectfully requested.

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